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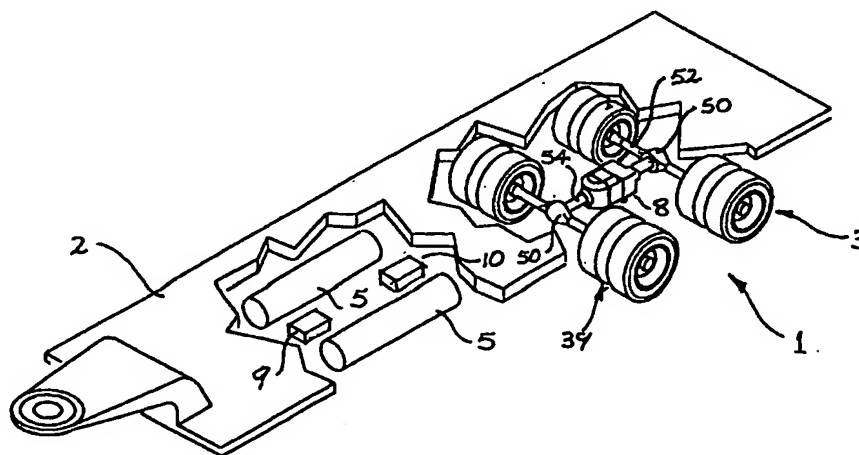
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- (71) Applicant (for all designated States except US): **PERMO-DRIVE RESEARCH AND DEVELOPMENT PTY LTD** [AU/AU]; 203 Southern Cross Drive, Ballina, NSW 2478 (AU).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **RUSH, Allan** [AU/AU]; 65 Boorie Creek Road, Lismore, NSW 2480 (AU).
- (74) Agent: **BALDWIN SHELSTON WATERS**; 60 Margaret Street, Sydney, NSW 2000 (AU).
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[Continued on next page]

(54) Title: **REGENERATIVE DRIVE SYSTEM FOR TRAILERS**



(57) Abstract: A regenerative energy management system (1) adapted for use with a compound vehicle including a prime mover, drive train and a trailer (2) including independent wheels (3) isolated from the prime mover drive train. The system (1) includes energy accumulation means (5) operable selectively to store and release energy through controlled receipt and release of pressurised hydraulic fluid; a positive displacement hydraulic pump/motor assembly (8) in fluid communication with the energy accumulation means (5); and a low-pressure hydraulic reservoir (9) in fluid communication with pump/motor assembly. The pump/motor assembly (8) has a drive shaft for connection to at least one of the wheels (3). In a braking mode, the assembly (8) retards the associated wheel (3) by pumping hydraulic fluid into the accumulation means (5) while in a driving mode, it supplies supplementary power using hydraulic fluid from the accumulation means (5) and in a neutral mode, it exerts no substantial driving or retarding influence on the wheel (3).

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/AU03/01236

A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl. ⁷: B60K 6/12; B60T 10/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

See below under "Electronic database consulted"

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

DWPI : IPC B60K, B62D, B60T with keywords hydraulic, regenerative, brake and similar terms

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4986383 A (EVANS) 22 January 1991 The whole document	1-35
X	US 3892283A (JOHNSON) 1 July 1975 The whole document	1-35
X	US 4441573 A (CARMAN et al.) 10 April 1984 The whole document	1-35

☒ Further documents are listed in the continuation of Box C

☒ See patent family annex

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

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Name and mailing address of the ISA/AU
AUSTRALIAN PATENT OFFICE
PO BOX 200, WODEN ACT 2606, AUSTRALIA
E-mail address: pct@ipaustralia.gov.au
Facsimile No. (02) 6285 3929

Authorized officer
ASANKA PERERA
Telephone No : (02) 6283 2373

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 00/13952 A1 (PERMO-DRIVE RESEARCH AND DEVELOPMENT PTY. LTD) 16 March 2000 The whole document, especially claims 1-22	1-35

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU03/01236

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member			
US	4986383	NONE			
US	3892283	NONE			
US	4441573	NONE			
WO	0013952	AU	60696/99	EP	1150871
		ZA	200101806	US	2001047654
END OF ANNEX					